

 INSTORE – PROCESS MEASUREMENT & ANALYTICS | DATA SHEET

Ultrasonic level Der Fluss- 2000 Wall Mounted Ultrasonic Flow Meter



Measurement made easy

Reduced installation cost

- Easy access terminations
- Display makes for easy troubleshooting

High functionality on standard product

- Data Line :Connected with main board
- SD Card & Card Base
- SD Card Working Status Indicator
- Fixed Cuppery Piller
- Wide Varieties of Sensors
- Strong Anti- Interference
- Powerful Recording Functions
- Ultrasonic transit-time principle, the 4-byte floating point IEEE754
- Can be connected 2x10 backlit characterers or 2x20 characterer LCD display support for English, Chinese, German etc...
- Isolated RS485 serial interface can be upgrade to the meter via a PC computer support protocols such as MODBUS

Wide range of applicability

- Water and wastewater
- Power
- Mining and metals
- Food and beverage
- Pharmaceutical
- Paper and pulp

Overview

Der fluss 2000

Welcome to use the new generation ultrasonic flow meter made of our patented technology. ISE-2000 Series Ultrasonic Flow/Heat Meters utilize the transit-time principle to measure the velocity of relatively clean liquids in full pipes. The purpose of this guide is to provide installation procedures and basic operating instructions for ISE-2000 Series Ultrasonic Flow/Heat Meters.

Composition of Ultrasonic flow meter

Ultrasonic Flow meter = Converter + Transducer
 Ultrasonic Heat meter = Converter + Transducer + Temperature transducer

Features & Description



- High Accuracy Measuring- Linearity : better than 0.5%, Repeatability : better than 0.2% , Accuracy : better than +/-1%
- Wide Measuring Range : Several types transducer for selection,measuring pipe size from DN 15mm to DN 6000mm
- High Reliability : Adopt low voltage, multi-pulse technology to improve accuracy useful life and reliability
- Strong Anti-interferece : Dual –balance signal differential receiver/driver circuit to avoid interference of converter,TV tower, high voltage line etc.
- Powerful Recording Function :
 Automatically record the following data:
 1. The totalizer data of the last 512days/128 months/ 10 years
 2. The time and corresponding flow meter of the last 64 times of power on and off events
 3. The working status of the last 32 days

Clamp On Type Ultrasonic Flow Meter

Temperature Transducer

Temperature Transducer	Model	Measuring range	Temperature	Cutoff Water
Clamp On	CT-1	>/- DN50	-40 ~ 160°C	No Need

Flow/Temperature Transducer

Flow Transducer	Picture	Model	Measuring Range	Temperature
Clamp On		TS 2 (Small)	DN-25-100	-30 ~ 90°C
		TM-1 (Medium)	DN-50-700	
		TL-1 (Large)	DN-300-6000	
High Temp. Clamp On		TS-2-HT(Small)	DN-25-100	-30 ~ 160°C
		TM-1 HT(Medium)	DN-50-700	
		TL-1-HT(Large)	DN-300-6000	

Types Of Converters

Items : Separated Mounted

1.Wall Mounted : ISE 2000 B 2.Wall Mounted:ISE 2000 SW



Measuring Diagrams For Clamp Type

Separated Mounted



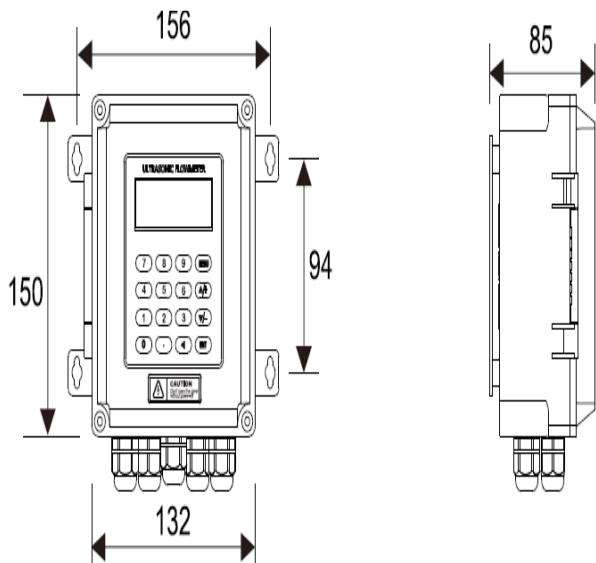
*Temperature can be measured by connecting PT100 temperature transducer on both supply and return pipes



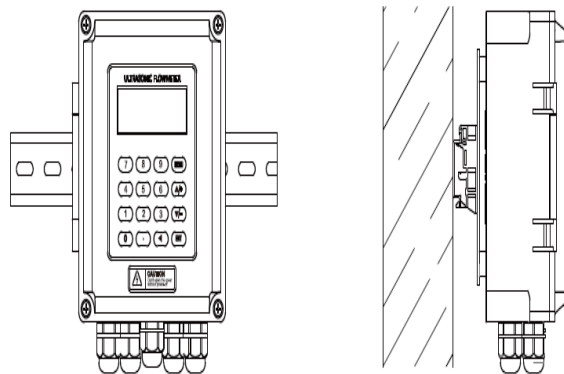
Converter Installation and Wiring Diagram

Separated Mounted

Der fluss 2000 B Installation Instruction

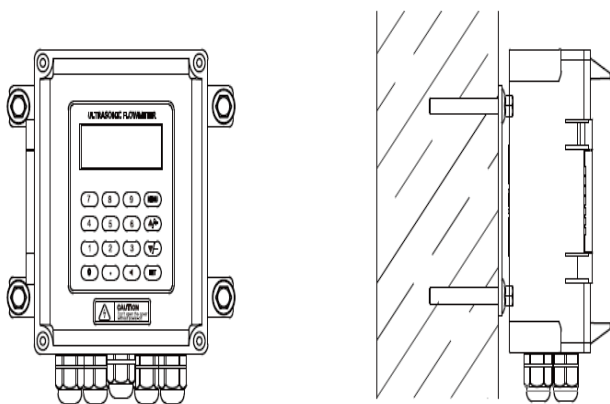


- DIN-rail mounting by using PCB bracket



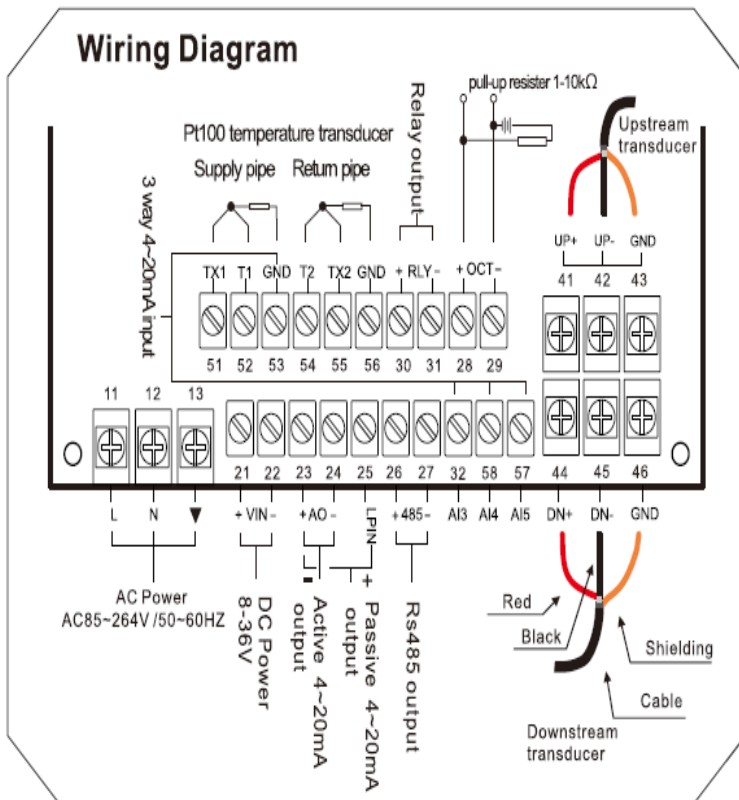
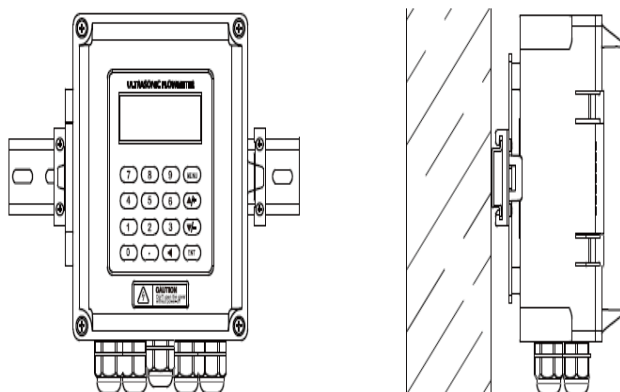
*Converter of ISE-2000B can be installed on the wall or in distribution box and explosion-proof box

- Wall mounting: Fix the converter with 4 $\Phi 6$ expansion bolts or normal nails.

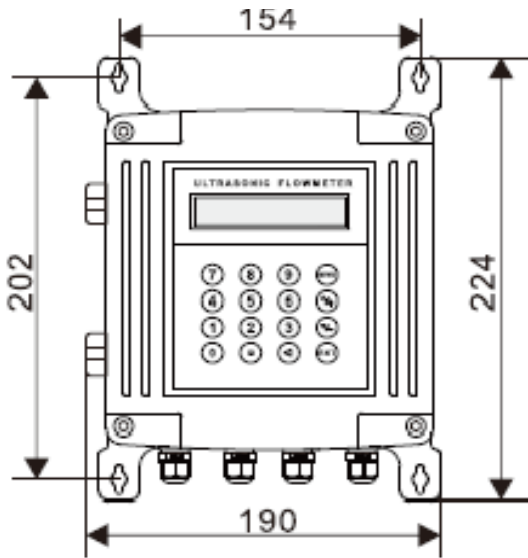


- ISE-2000B Wiring Diagram

- DIN-rail mounting by using rail fixing clamps.



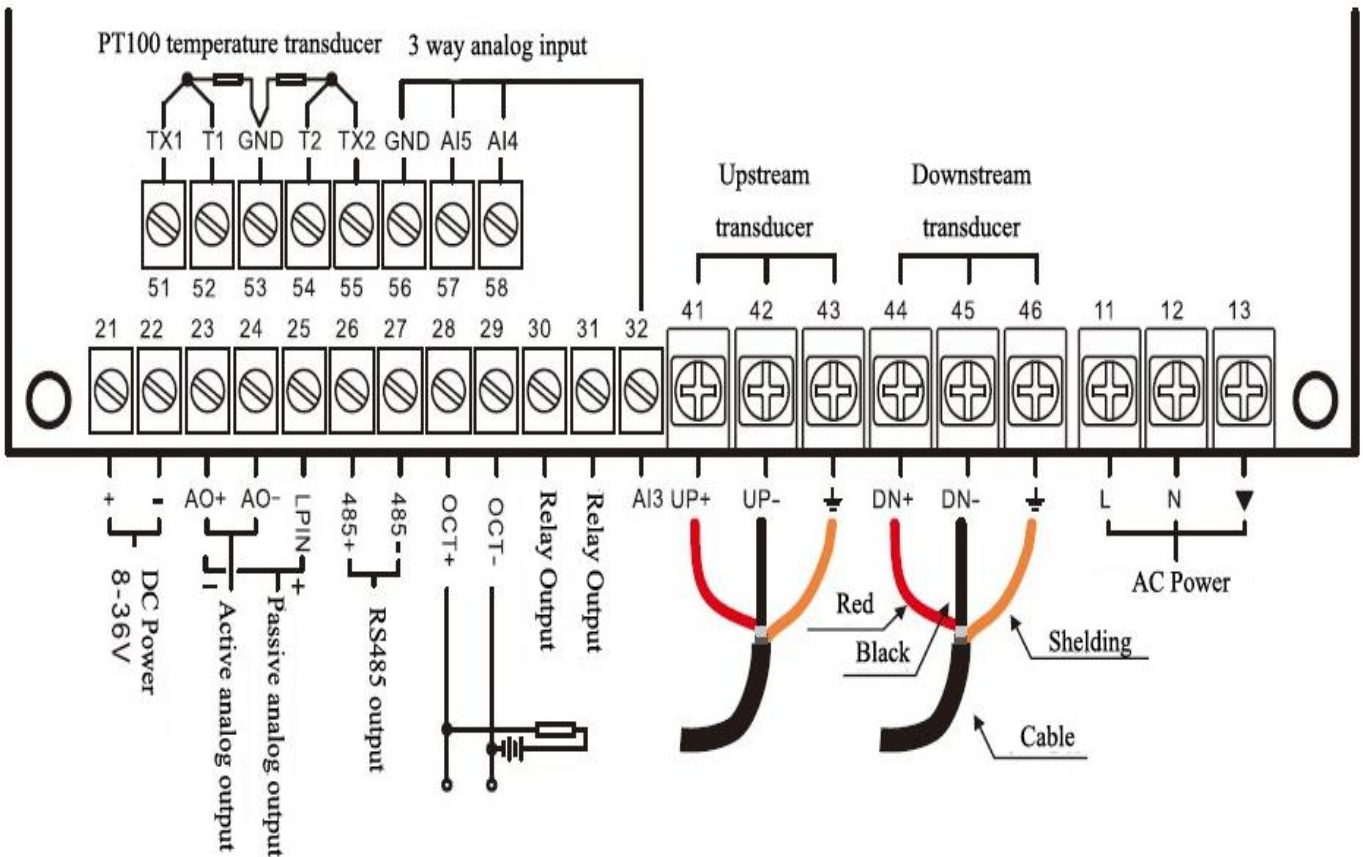
Der fluss- 2000 SW Installation Instruction



Thickness: 75mm

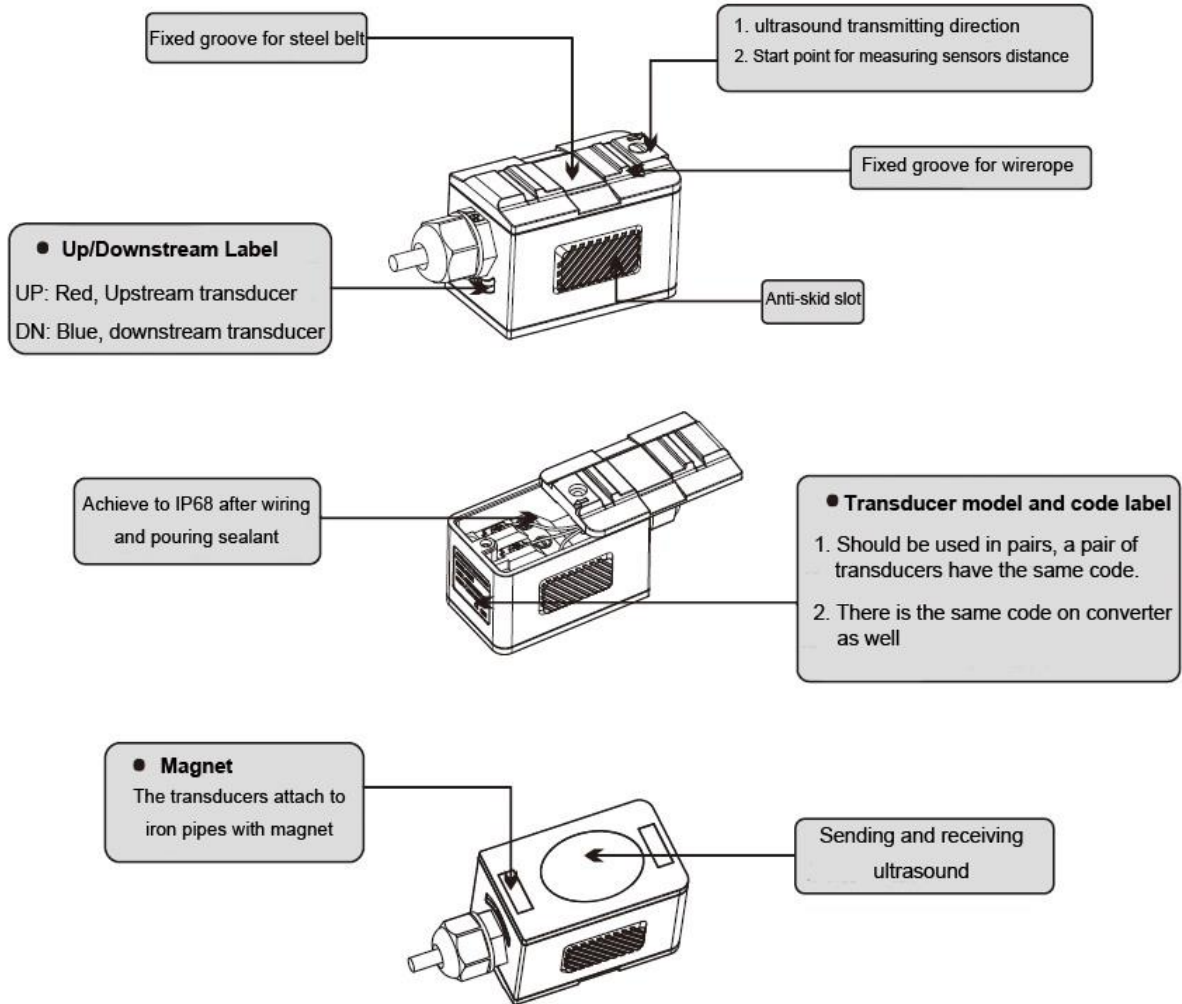
Wall mounting: Fix the converter with 4 Φ6 expansion bolts.

Der fluss- 2000 SW Wiring Diagram

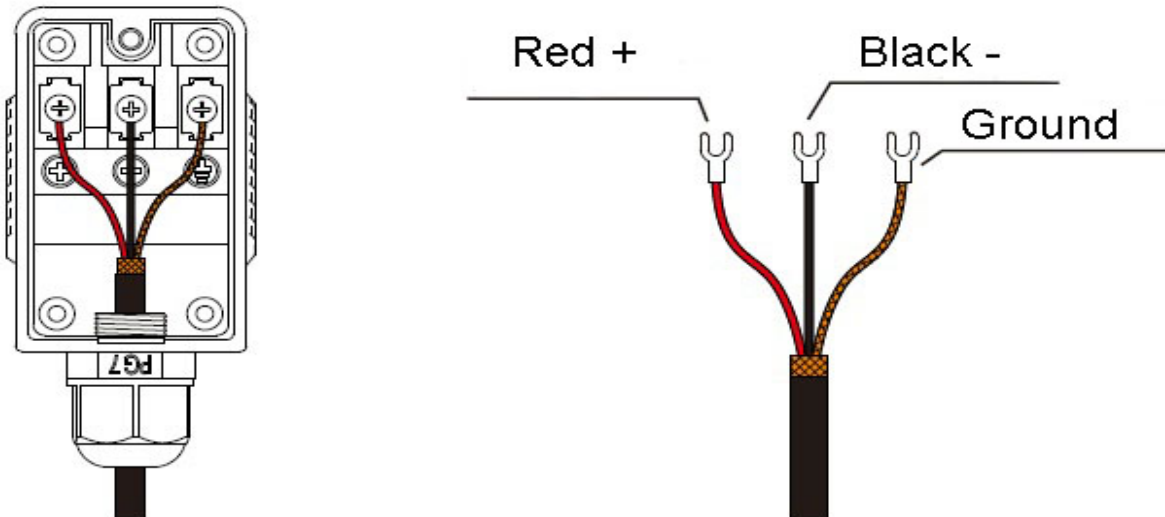


Transducer Introduction And Wiring Diagram

Clamp On Type Transducer




Wiring Diagram








Flow Measurement of figure

false	plug-in	tubulation
		
<p>.Installation without drying up, no pressure loss</p> <p>.Accuracy 1</p> <p>.Easy installation and maintenance, the user can install</p> <p>.The highest price, the price has nothing to do with the nominal diameter</p> <p>.Better working conditions applicable to the environment</p>	<p>.Installation without drying up, no pressure loss</p> <p>.Accuracy 1</p> <p>.Applicable special tools to install the user fine after training</p> <p>.Price has nothing to do with the DN</p> <p>.The received signal is good, stable and reliable long-term operation</p>	<p>.Installation requires drying up, broken pipes, no pressure loss</p> <p>.Generally up to an accuracy of up to 0.5</p> <p>.Installation and maintenance required to stop, users can install their own</p> <p>.DN meter price impact</p> <p>.The highest accuracy, the received signal is best, long-term stability</p>

Heat Measurement of figure

false	Plug-in	tubulation
 <p>feed pipe</p> <p>return pipe</p>	 <p>feed pipe</p> <p>return pipe</p>	 <p>feed pipe</p> <p>return pipe</p>



Ordering information

Basic ordering information for DerFluss 2000 Series

Some updates to the product options. The product code stays the same, only options are added. .

Here they are:

Der fluss 2000 Series	X	X	X	X	X	X
Explosion protection certification						
General Purpose	AY					
Sensor type and range						
Standard Clamp On Type Small		S15				
Standard Clamp On Type Medium		M30				
Standard Clamp On Type Large		L45				
High Temperature Clamp On Type Small		SH15				
High Temperature Clamp On Type Medium		MH30				
High Temperature Clamp On Type Large		LH45				
Standard Bracket Type Small		SB15				
Standard Bracket Type Medium		MB30				
Standard Bracket Type Large		LB45				
High Temperature Bracket Type Small		ST15				
High Temperature Bracket Type Medium		MT30				
High Temperature Bracket Type Large		LT45				
Accuracy						
Accuracy 1%			A1			
Accuracy 0.5%			A0			
Flow Measurements						
False				F0		
Plug In				F1		
Tubulation				F2		
Power supply						
DC8~36V or AC85~264V					A1	
Out signal						
4-20mA current output impedance 0 ~ 1K, accuracy 0.1%						A1
Optionally						
OCT pulse output (pulse width 6 ~ 1000ms, default 200ms)						O1
relay output						R1



Additional ordering information

Additional ordering information for ***

Add one or more codes after basic ordering information to select all required options

	X	X	X	X	X	X	X
Signal cable length							
Without signal cable	SC0						
10 m (approx. 30 ft)	SC2						
20 m (approx. 66 ft)	SC4						
30 m (approx. 98 ft)	SC6						
40 m (approx. 131 ft)	SC8						
40 m (approx. 131 ft)	SCA						
Sensor options							
Aiming kit		SEK					
Bracket Shape / Material							
For pipe mounting / Stainless steel			B2				
Device Identification Plate							
Adhesive label with TAG no.				TC			
Certificates							
Inspection certificate for calibration with test report					CR		
Documentation Language							
English							M5
Chinese							M6
German							M7



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